

### REMARKS

Claims 39-45 are currently pending in the application. By this amendment, claims 1-38 are cancelled and new claims 39- 45 are added for the Examiner's consideration. The foregoing separate sheets marked as "Listing of Claims" show all the claims in the application, with an indication of the current status of each.

Cancellation of claims herein is without prejudice and is intended solely to accelerate prosecution of the application by simplifying outstanding issues. The Applicant reserves the right to pursue the subject matter of the cancelled claims, or claims to other disclosed subject matter, in one or more continuation or divisional applications.

#### **Subject matter of the invention and New Claims**

The invention is based on the discovery that low molecular weight  $\beta$ -cellulose-derived polymers such as fructans (e.g. inulins and levans) possess a previously unrecognized property: they are excellent termite attractants. When used to treat or spike traditional termite baits, they render the baits more attractive to termites. While inulins and levans may be components of some materials that have been used in traditional compositions for baiting termites (e.g. wheat flour), the use of low molecular weight  $\beta$ -cellulose-derived polymers as a bait spiking constituent was previously unknown.

New independent claim 39 recites a termite bait system, comprising at least one termite bait or feeding matrix that is treated or spiked with a termite attractant consisting of at least one low molecular weight  $\beta$ -cellulose-derived polymer. Support for the language of new claim 39 is found in the specification as follows, using paragraph numbers of the application as published: termite bait system paragraph [0027]; [termite bait or feeding matrix, paragraphs [0042] - [0045]; spiked or treated with a termite attractant, paragraphs [0103] and [0055]-[0056]; at least one low molecular weight  $\beta$ -cellulose-derived polymer paragraph [0104].

New dependent claims 40-42 recite embodiments of the invention in which the at least one low molecular weight  $\beta$ -cellulose-derived polymer is a fructan (supported in paragraphs [0028] and [0036] and original claim 10). The fructan may be an inulin (see paragraphs [0028], [0036] and 0039] and original claims 11-12) or a levan (see paragraphs [0028], [0036] and [0040] and original claims 13-14).

New dependent claims 42 and 43 recite embodiments in which the at least one termite bait or feeding matrix comprises a termite food source (see paragraph [0018]) and comprise a toxicant or termiticide (paragraph [0046]), respectively.

New independent claim 44 recites a method of preparing a termite bait system by treating or spiking at least one termite bait or feeding matrix with a termite attractant consisting of a low molecular weight  $\beta$ -cellulose-derived polymer. This embodiment is supported, for example, in Example 1 e.g. in paragraph [0058].

New independent claim 45 recites a method of attracting termites to a termite bait or feeding matrix, comprising the step of treating or spiking the termite bait or feeding matrix with a termite attractant consisting of a low molecular weight  $\beta$ -cellulose-derived polymer. This embodiment is supported, for example, in paragraphs [0020] - [0021] and in original claim 30.

Thus, new claims 39-45 do not add new matter to the application.

#### **Claim Rejections: 35 USC § 102(b)**

Claims 1-28 and 35-38 stand rejected under 35 USC § 102(b) as anticipated by Hennart (US 4,189,475). In view of the cancellation of claims 1-28 and 35-38, this rejection is moot.

Hennart also does not anticipate the subject matter of new claims 39- 45. Hennart teaches insecticidal compositions which may include, for example, edible substances such as cereal flours, flours and starches from tubers (see lines 40-46 of column 3), for example wheat flour (see the second table in column 7). However, Hennart does not teach treating or spiking such compositions with a termite attractant consisting of at least one low molecular weight  $\beta$ -cellulose-derived polymer, such as a fructan (e.g. an inulin and or levan).

Claims 1-28 and 35-38 stand rejected under 35 USC § 102(b) as anticipated by Gould (US 4,774,098). In view of the cancellation of claims 1-28 and 35-38, this rejection is moot.

Gould also does not anticipate the subject matter of new claims 39- 45. Gould teaches only a wheat flour dough which includes 60-70% by volume of nonwoody, lignocellulosic material. There is no teaching in Gould that such dough should or could be treated or spiked with a termite attractant of any type, and specifically not with a low molecular weight  $\beta$ -cellulose-derived polymer. Such treatment would not make sense in the context of the Gould invention (the compositions taught by Gould are intended for human consumption, lines 38-40 of column 2), would serve no purpose, and would add soluble or slightly soluble material to the

dough (see paragraphs [0018] - [0019] of the present application as published), whereas Gould seeks to provide insoluble fiber material (see column 4, lines 35-36 and 46-47; it is the insoluble fraction of modified cellulose that is of interest to and that is employed by Gould).

Claims 1-25, 28, 29 and 35-38 stand rejected under 35 USC § 102(b) as anticipated by Theuer et al. (US 5,840,361). In view of the cancellation of claims 1-25, 28, 29 and 35-38, this rejection is moot.

Theuer also does not anticipate the subject matter of new claims 39- 45. Theuer teaches baby food compositions which may include pureed Jerusalem artichokes. There is no teaching, however, of treating or spiking the compositions with a termite attractant of any type, and certainly not with low molecular weight  $\beta$ -cellulose-derived polymers. In fact, this would not make any sense since the compositions are intended for feeding human babies, which to Applicant's knowledge, are not attracted by low molecular weight  $\beta$ -cellulose-derived polymers.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 103(a)**

Claims 1-28 and 30-38 stand rejected under 35 USC § 103(a) as obvious over Thorne et al. (US 5,555,672) in view of Prestwich (US 4,455,441), Minagawa et al. (US 5,096,710), Gould et al. (US 4,774,098) and Catani et al. (US 5,998,177). In view of the cancellation of claims 1-28 and 30-38, this rejection is moot.

The alleged combination of Thorne, Prestwich, Minagawa, Gould and Catani also does not render obvious the invention as claimed in new claims 39-45, since none of the cited references teaches the use of low molecular weight  $\beta$ -cellulose-derived polymers such as fructans such as inulins and levans as termite attractants.

Thorne teaches a system for termite detection and control which includes a housing with a non-toxic bait material. The preferred bait material is described as comprising a nutrient binding medium such as agar, and decayed birch, uric acid and water. However, there is no teaching or suggestion concerning the specific use of low molecular weight  $\beta$ -cellulose-derived polymers such as fructans (e.g. inulins and levans), as termite attractants. This property of low molecular weight  $\beta$ -cellulose-derived polymers was not known or appreciated by Thorne, and Thorne thus cannot provide this teaching to the alleged combination.

Prestwich also teaches attractant termiticidal compounds, but these compounds are fluoroalkanol, not low molecular weight  $\beta$ -cellulose-derived polymers. Prestwich also teaches that dried grass can be used as termite bait, but does not show or suggest the spiking of such bait with low molecular weight  $\beta$ -cellulose-derived polymers as taught herein, and thus does not provide any teaching which, when combined with the teachings of the other cited references, would render the present invention obvious in view of the alleged combination.

Minagawa discloses poison bait for control of noxious insects, teaching that wheat flours and powders are feeding attractants for termites. However, Minagawa also does not teach that the wheat flours and powders could be further treated in particular with one or more low molecular weight  $\beta$ -cellulose-derived polymers as described herein, in order to make the bait more attractive to termites. Thus, Minagawa cannot provide this teaching to the alleged combination, an as such does not cure or mitigate the defects thereof.

The teachings of Gould are discussed above. Briefly, Gould teaches a wheat flour dough which includes 60-70% by volume of nonwoody, lignocellulosic material, the material being insoluble, and the dough being intended for human consumption. There is no teaching or suggestion in Gould of spiking or treating the dough with a termite attractant, e.g. with one or more low molecular weight  $\beta$ -cellulose-derived polymers as described herein, specifically fructans such as inulins and levans (which are soluble or slightly soluble). Thus, Gould does not supply such a teaching to the alleged combination, and the alleged combination, lacking this teaching, does not render the present invention obvious.

Catani teaches a process for processing sucrose into glucose, and also processes of making some fructans, e.g. inulins and levans. In so doing, Catani provides a description of these materials and their natural sources. However, there is no teaching in Catani that shows or suggests that these substances, in and of themselves, are termite attractants. Catani does not teach anything about insects or insect pests, but is focused solely on the production of the substances and their possible uses in foods, as described in column 3 at lines 45-52 as follows: "Glucose is a staple article of commerce and is sold for pharmaceutical and food uses. A branched inulin fructan has good performance in organoleptic tests and possesses bulking properties similar to sucrose for food use, as does non-branched inulins, but without inducing excessive gas upon consumption. A branched levan fructan also has good bulking properties for food use." As can be

seen, there is no suggested use such as that discovered by the present inventors, i.e. use as a termite attractant. Catani teaches only the existence, sources and traditional uses of these compounds. Thus, Catani fails to cure or mitigate the defects of the other references, as described above.

None of the cited references teaches that fructans in and of themselves are excellent termite attractants, or that they can be used to spike attractant matrices, and the alleged combination of references thus cannot render the present invention obvious. The existence of fructans such as inulins and levens was known prior to the present invention. What was not appreciated, however, was that these compounds would, when separated from the other many components of substances which were traditionally used as termite bait (e.g. wheat flour), strongly attract termites and hence could be used as an additive to treat or spike traditional termite bait compositions, thereby making the traditional bait compositions much more attractive to termites.

#### **Concluding Remarks**

In view of the foregoing, it is requested that the application be reconsidered, that claims 39-45 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at 703-787-9400 (fax: 703-787-7557; email: ruth@wcc-ip.com) to discuss any other changes deemed necessary in a telephonic or personal interview.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



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